

June 6, 2007

Pamela Creedon
Executive Officer
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

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Dear Ms. Creedon:

Solano Land Trust (SLT) would like to request that the Central Valley Regional Water Quality Control Board allocate \$140,000 to SLT for a Supplemental Environmental Project (SEP) in Solano County.

The \$140,000 results from Administrative Civil Liability Order No. R5-2007-0513. SLT's proposal has the support of DR Horton. SLT proposes to expend the \$140,000 on two projects in Solano County that contain habitat and water quality values similar to those values at issue in Administrative Civil Liability Order No. R5-2007-0513.

I have enclosed with this letter the following documents that provide more details about SLT and this proposal.

- SLT Overview & Qualifications
- SEP Proposal
 - o Vernal Pool Habitat Management
 - o Lindsey Slough Monitoring and Adaptive Management Plan
 - o Independent Third-Party Audit (optional)
 - o Project Scope, Management & Reporting
 - o Property Attachments

Please let me know if you have any questions or require any further information. I hope that the Board will allow SLT to apply these funds to restore and manage important natural lands in Solano County for future generations.

Sincerely,

Marilyn Farley
Executive Director

cc: Michele DeCristoforo, State Water Resources Control Board
Sue McConnell, Central Valley Water Quality Control Board
Tim Collity, DR Horton

Overview and Qualifications

Solano Land Trust (SLT) is a registered 501(c)(3) nonprofit public benefit land trust (Federal Tax Id # 94-3015363). The mission of SLT is to permanently protect and preserve farmland, ranchland and open space in Solano County through the acquisition of land and conservation easements, education, and land management.

Founded in 1986 as the Solano County Farmlands and Open Space Foundation, the group changed its name in 2004 to the Solano Land Trust. SLT was established as a result of litigation involving open space advocates, land developers and a municipal government. This unusual genesis created a board that reflects all sides of land-use issues united in the mission to preserve the agricultural legacy and natural landscapes of Solano County. SLT is governed by a thirteen-member board of directors, managed by eleven staff and supported by more than 180 volunteers.

SLT has permanently protected over 19,000 acres of natural areas and agricultural lands to date. SLT protects properties through the purchase and donation of conservation easements and land. Project partners include willing landowners, local communities, public agencies, foundations, private companies, and others. Successful projects have included the acquisition of conservation easements on prime farmland along Interstate 80 to form the Dixon-Davis Greenbelt, the protection of over 5000-acres of rangeland and oak woodlands in the hills between Vallejo and Fairfield, and the preservation of multiple properties with rare vernal pool and tidal wetland habitat in eastern Solano County.

SLT currently owns and manages over 10,000 acres of open space preserves. Three of SLT's properties – Jepson Prairie, Rush Ranch, and Lynch Canyon are open to the public and are used for passive recreation including hiking and bird watching. Some of SLT's properties are widely recognized for their biological importance. Rush Ranch was designated as part of the San Francisco Bay National Estuarine Research Reserve (NERR) in 2003 as a site for marsh restoration research. Jepson Prairie Preserve, which is part of the University of California's Natural Reserve System, is considered one of the best remaining examples vernal pool grasslands in California. The property, along with SLT's adjacent Wilcox Preserve, is home to numerous rare and endangered species.

SLT recently worked with biologist Carol Witham and the California Department of Fish and Game to complete the Greater Jepson Regional Management Plan. The document provides a framework for long term management of the 20,000-acre area including SLT's Jepson Prairie and Wilcox Preserves along with adjacent public and private land. SLT conservation project manager, Ben Wallace, and land steward, Ken Poerner, oversee SLT preserve management including the implementation of the plan. SLT has established small endowments for the Jepson Prairie and Wilcox Preserves to fund ongoing management responsibilities for the properties. However, these endowments are currently too small to sufficiently fund all management needs.

In the Jepson Prairie area, SLT is collaborating with the California Department of Fish and Game and the CALFED Ecosystem Restoration Program to develop a restoration plan for the historic channel of Lindsey Slough on the Calhoun Cut Ecological Reserve. This site represents one of the optimal sites for freshwater tidal marsh restoration in the Sacramento-San Joaquin Delta. As project manager, SLT is collaborating with local partners, including the Solano County Water Agency, to examine the interaction of wetland restoration processes and water quality at the nearby Barker Slough Pumping Plant, which provides municipal drinking water to local communities via the North Bay Aqueduct.

SEP Proposal – Solano Land Trust
\$140,000 related to Complaint No. R5-2007-0513

With the approval of the Central Valley Regional Water Quality Control Board (Board) Executive Officer, Solano Land Trust (SLT) proposes to utilize the \$140,000 for a Supplemental Environmental Project (SEP) that protects restores habitat and water quality values similar to those values allegedly disturbed in Order No. R5-2007-0513. The proposed SEP includes \$115,000 for baseline monitoring and adaptive management of the Lindsey Slough Restoration Project and \$20,000 for weed control at Jepson Prairie Preserve (with an optional \$5000 to pay for an independent third-party audit of SEP expenditures).

I. Baseline Monitoring and Adaptive Management for the Lindsey Slough Restoration Project (\$120,000)

As the first component of this SEP, SLT proposes to use funding to conduct baseline monitoring and develop an adaptive management plan for the Lindsey Slough Restoration Project.

Project Benefits

The Lindsey Slough Restoration Project is one of the most promising projects in the North Delta. With support of a CALFED grant, SLT hired Philip Williams & Associates and EDAW, Inc to conduct a Feasibility Analysis which shows that it is possible to restore a historically-diked wetland with limited tidal connectivity, resulting in up to *138 acres fully-restored freshwater tidal marsh* and up to *1.9 miles of functional tidal channel habitat* at Lindsey Slough. These habitat types are very rare in the delta. They will increase rearing habitat and primary productivity for native fish, such as the endangered delta smelt, as well as increasing the quality and extent of terrestrial habitat benefiting native songbirds, wildlife and special status plants. Lindsey Slough is hydrologically-connected to the Cache Slough watershed and the Yolo Bypass. Conducting Baseline Monitoring and preparing an Adaptive Management Plan is essential to achieving these restoration outcomes. The resulting data will make a valuable contribution to the science tidal-marsh restoration in the Bay-Delta Ecosystem as well.

Context

In the vicinity of the restoration site, the Solano County Water Agency (SCWA) operates the Barker Slough Pumping Plant, which contributes drinking water to municipalities in Solano and Napa Counties. Uncertainties about how the restoration project will effect water quality and fish entrainment at the pumping plant are potential constraints to implementing the restoration project. Therefore, SLT will be implementing the project concurrently with monitoring and adaptive management to ensure that the project has a beneficial or neutral impact on the pumping plant and other surrounding land uses.

Three major milestones need to be reached in order to prepare the Lindsey Slough Restoration Project for permitting and implementation. These are:

1. Establish safeguards that there are not water quality impacts—such as substantial increases in TOC/DOC or meHg—at Barker Slough Pumping Plant;

2. Ensure that delta smelt habitat can be improved without impacting the operations of Barker Slough Pumping Plant; and
3. Complete a restoration plan, including baseline data, adaptive management process, and construction designs for the project.

SCWA is presently conducting studies to determine the source water for the Barker Slough Pumping Plant. Once these studies yield results, SLT will work with experts from the U.S. Geological Survey (USGS), the California Department of Fish and Game, and private environmental consultants to conduct baseline monitoring and develop a restoration plan that addresses these issues. The SEP project will enable us to meet the first of these milestones.

Scope of Request

We are requesting funding from the Supplemental Environmental Program (SEP) to meet the first milestone, establishing safeguards that there are not water quality impacts. The SEP project will proceed in two phases, if sufficient funds are available:

- First Phase: Conduct baseline water quality monitoring at the Lindsey Slough Restoration Project Site. Requesting \$75,000. Final product will be a Summary of Monitoring Data.
- Second Phase: Prepare an Adaptive Management Plan for water quality monitoring at the Lindsey Slough Restoration Project. The plan will include analysis of baseline water quality monitoring data and methodology for additional pre- and post project data collection, analysis and reporting. Requesting \$45,000. Final product will be the water quality component of the Adaptive Management Plan.

SLT will coordinate with the Solano County Water Agency on the timing and scope of water quality monitoring so that the monitoring SLT is conducting for the restoration project will complement the studies they are conducting. If SLT is able to leverage cost savings or matching funds through this collaboration, SLT will proceed toward the second or third milestone as needed.

Objective

Monitoring and Adaptive Management Planning for the Lindsey Slough Restoration Project

Milestones

Timeline

Task 1 -

Project Start Date	July 2007
Deliver Summary of Baseline Monitoring Data	December 2008

Task 2 -

Draft Adaptive Management Plan	June 2008
Final Plan/Report to Central Valley RWQCB	December 2008

Budget*

Amount

Task 1 -

Project Planning, Management, Administration, and Oversight	\$ 3,750
Research, Coordination, and Field Support for Baseline Monitoring;	\$ 5,250

Content Development		
Subcontractor Research, Field Work, Data Collection, and Preliminary Analysis for Baseline Monitoring	\$ 60,000	
Equipment	\$ 4,500	
Materials and Supplies	\$ 1,000	
Travel	\$ 500	
<i>Subtotal</i>		<i>\$ 75,000</i>
<i>Task 2 -</i>		
Project Planning, Management, Administration, and Oversight	\$ 2,250	
Research, Coordination, Content Development, and Production of Adaptive Management Plan	\$ 17,250	
Subcontractor Biological/Cultural Field Surveys, Data Analysis & Technical Content Development	\$ 25,000	
Equipment	\$ 0	
Materials and Supplies	\$ 400	
Travel	\$ 100	
<i>Subtotal</i>		<i>\$ 45,000</i>
Total		\$ 120,000

**Specific scope and intensity of water quality monitoring effort is contingent on a site review by the selected water quality expert (s) and will be scaled according to funding availability.*

Project Team and Qualifications

SLT is the project manager for the Lindsey Slough Restoration Project. SLT has been leading the project since 2004, with the support of a grant from the CALFED Ecosystem Restoration Program. SLT will work in cooperation with the following organizations to complete the SEP project:

- The California Department of Fish and Game (CDFG): CDFG owns the Calhoun Cut Ecological Reserve. SLT and the Department have been cooperating on the project since January 2005.
- The Solano County Water Agency (SCWA): SCWA operates the Barker Slough Pumping Plant. SLT will coordinate monitoring efforts in the slough as needed.
- Solano Land Trust has contacted four water quality experts as potential project contractors:
 - i. U.S. Geological Survey (USGS) : USGS has conducted monitoring and research on DOC/TOC and mercury methylation in the delta at Brown's Island and Jones Tract.
 - ii. Dr. Daryl Slotton: Dr. Slotton conducts small fish tissue monitoring for mercury bio-accumulation at UC Davis.
 - iii. *Moss Landing Marine Laboratory*: Moss Land Marine Laboratory has expertise in TOC/DOC monitoring and large fish tissue sampling for methyl mercury bio-accumulation;
 - iv) Dr. Tomoko Komada: Dr. Komada, San Francisco State Romberg-Tiburon Center, has expertise in TOC/DOC analysis.

SLT anticipates issuing a contract to one of the above agencies/labs to conduct water quality monitoring funded by the SEP program.

The following organizations will be involved with other aspects of the Lindsey Slough Restoration Plan. They may provide advice or technical input to the SEP project as needed:

- Phillip Williams & Associates (PWA) and EDAW: prepared the feasibility analysis. SLT anticipates that PWA and EDAW will lead the restoration planning process, with support from the CALFED grant.
- SLT anticipates partnering with local experts, such as Solano County Water Agency, the Solano County Resource Conservation District, and local independent contractors on water quality monitoring and ecological issues.

II. Vernal pool, riparian, and grassland invasive weed control at Jepson Prairie Preserve (\$20,000)

As the second component of this SEP, SLT proposes to implement an integrated invasive weed control program in riparian and vernal pool areas at Jepson Prairie Preserve.

Project Background

Jepson Prairie Preserve is one of California's best remaining examples of claypan vernal pools and native bunchgrass prairie; habitats that were once widespread in the Central Valley but are now mostly converted to agricultural or other development. The preserve is bordered on both the north and the south by tidal sloughs, which connect it with the vast San Francisco Bay Delta. Jepson Prairie wetlands are home to a many rare and endangered species including vernal pool fairy shrimp, Conservancy fairy shrimp, vernal pool tadpole shrimp, and California tiger salamander. Currently, noxious, invasive weeds threaten the vernal pools and riparian areas which make up the preserve.

Project Summary

The proposed project will entail implementing an integrated invasive weed control program in riparian and vernal pool areas at Jepson Prairie Preserve. SLT has created a Regional Management Plan for the Greater Jepson Prairie Ecosystem that outlines best practices for eliminating the worst weeds on the preserve using control methods that are least harmful to water quality and non-target species. The proposed project will fund labor and materials to put key elements of the proposed weed control program into operation for two years. The project will focus on controlling and monitoring the worst weed problems on the property, primarily infestations of perennial pepperweed along Barker Slough and Calhoun Cut and along vernal pool margins. SLT will utilize a combination of eradication techniques including mowing, livestock grazing, prescribed burning, and limited herbicide application. SLT will conduct monitoring and mapping to determine the success and non-target effects of weed control efforts as part of an adaptive management strategy. SLT will implement this project in conjunction

with a preserve-wide vegetation transect monitoring program¹ with volunteers from the local community that assesses the long-term condition of the vernal pool grassland plant community. If resources allow, SLT will work with willing partners on neighboring properties within the Barker and Lindsey Slough corridors or extend the program to upland weeds such as non-native, invasive thistles or medusahead grass. SLT will submit periodic reports to the regulatory agencies as requested.

Project Benefits

- Prevent encroachment of non-native, noxious weeds into wetland areas, including the site of the proposed Lindsey Slough Restoration Project.
- Prevent invasive weeds from displacing habitat for rare and endangered species living in aquatic and riparian areas.
- Develop strategies for invasive weed control which are cost-effective and minimize harm to water quality and non-target species.
- Provide distributional information about weeds and native plant communities in the watershed of the proposed Lindsey Slough Restoration Project.

Project Calendar and Budget

SLT will implement the project over two years beginning July 20, 2007, and ending May 31, 2009. The project will cost a total of \$20,000 to implement the two-year weed control efforts. The cost breakdown of the project is as follows:

PROJECT BUDGET	
Tasks	Cost
<i>Labor and Services</i>	\$ 17,000
- Weed control field work	
- Monitoring data collection and analysis	
- GIS mapping	
- Project management and planning	
<i>Materials and Supplies</i>	\$ 1,900
<i>Equipment</i>	\$ 1,000
<i>Travel</i>	\$ 100
Total	\$20,000

¹ The transect monitoring program will not be funded by the SEP. The program is funded by SLT with assistance from volunteers. However, the transect monitoring will provide additional data on the success and non-target effects of the weed control efforts and will help inform adaptive management of the SEP project

III. INDEPENDENT THIRD-PARTY AUDIT (\$5,000, optional)

If it is the wish of the Regional Board Executive Officer, upon final completion of the SEP an independent third-party auditor may review the project and submit a written report to the Board. This auditor's report would confirm expenditure of the SEP funds contributed by DR Horton and help the Board assess environmental benefit of the SEP. The independent audit would contain an accounting on how the SEP funds were applied to the implementation of the above-identified projects. The auditor would be selected by SLT and approved by the Regional Board staff. If the Regional Board Executive Officer informs SLT that such an audit will be required at the completion of the SEP, then SLT will allocate \$5,000 for the audit (these funds would be subtracted from one or more of the above four projects at the discretion of SLT).

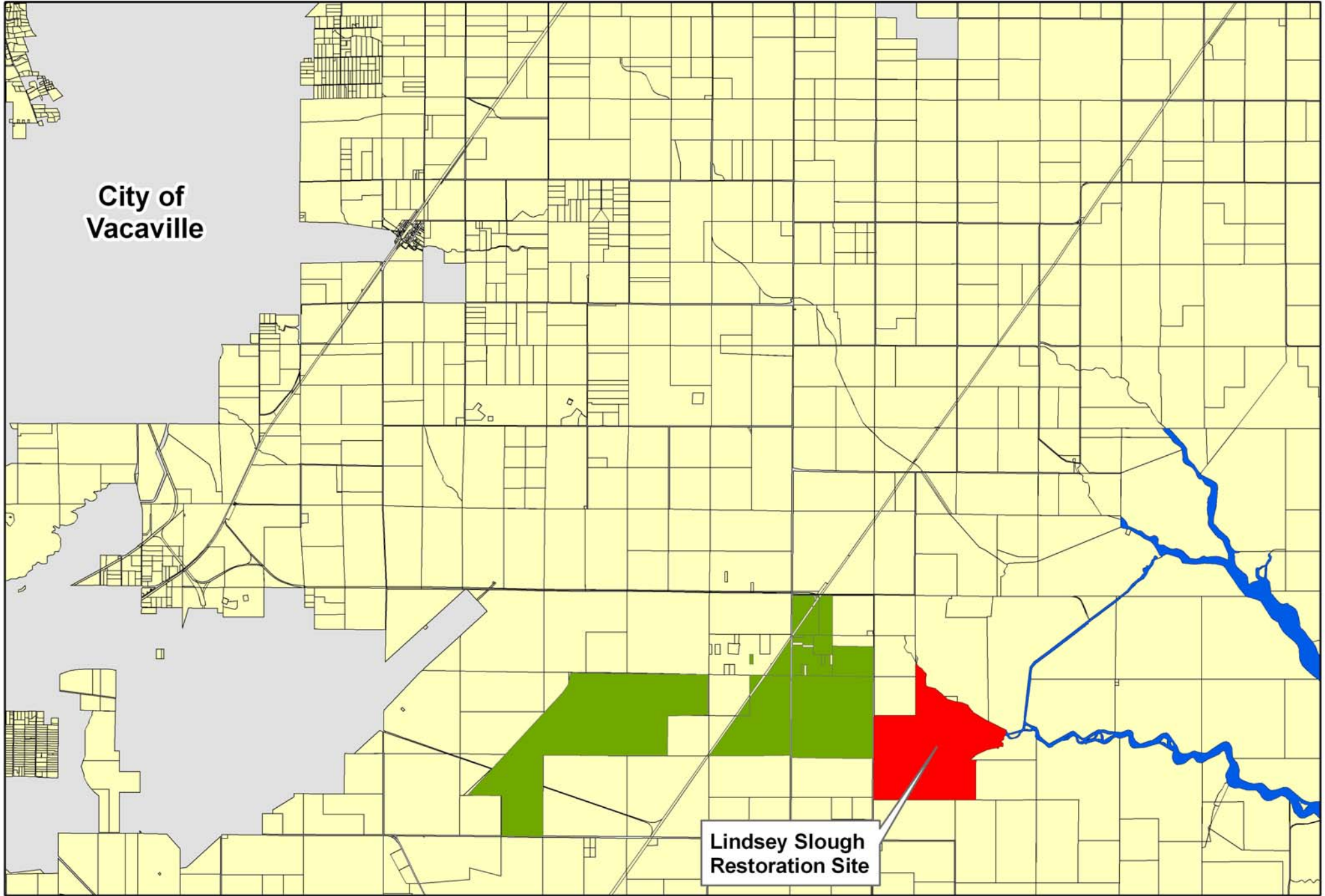
IV. PROJECT SCOPE, MANAGEMENT & REPORTING

SLT affirms that all monies received from the Board in conjunction with this SEP and/or pursuant to proceeds from the settlement of Order No. R5-2007-0513 will be used only for the purposes specified in this proposal. The monies will not be used for mitigation credit, for political lobbying, litigation activities, or administrative overhead. SLT also affirms that, to the best of its knowledge, Solano Land Trust, its officers, directors, employees, and their family members, will not receive any direct or indirect financial benefit from the SEP and will not use the SEP to satisfy any legal obligation other than the resolution of Order No. R5-2007-0513.

Upon receipt of the monies, SLT will initiate the various components of the SEP at its discretion based upon best management practices and other factors (availability of contractors, seasonal restrictions, coordination of other funding and activities, etc.). **All components of the SEP will be completed by May 31, 2009.**

In the event that unforeseen alterations in the scope of work and schedule for any of the specific projects identified is necessary, SLT will alert the Board of the need for scope or schedule revisions as soon as they become apparent and request a meeting to discuss the recommended adjustments. While the proposed SEP scope and schedule has been designed to be practicable, this project adjustment process is recommended as a way to provide an adaptive management element to the SEP.

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**City of
Vacaville**

**Lindsey Slough
Restoration Site**

Location of Lindsey Slough Restoration Site and Jepson Prairie Preserve



-  Jepson Prairie (SLT)
-  Calhoun Cut Reserve (DFG)